



Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
Canada

Tel (613) 632-5200
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00 7292

646.4001

Job Sheet 187481



Part No: 646.4001

Job Qty: 1 ea

Part Name: AS350 Cable Cutter System



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/5/18

Job Tracking No:

Due Date: 1/30/19

Created By: Jesse White

Type: Stock

Description: SIOP

Note: DWG REV C1 IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM IPP REV:B 15.01.08 AS PER DWG REV.B
DD VERF:JLM IPP REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	1 Ea	1/30/19	1/30/19	0.00	0.00	Start Up Stores/Pkg-1	
110	Packaging	1 pcs	1/30/19	1/30/19	0.00	0.00	Packaging1-1	
120	QC	1 pcs	1/30/19	1/30/19	0.00	0.00	QC4	
130	Packaging	1 pcs	1/30/19	1/30/19	0.00	0.00	Packaging3-1	
135	DC	1 pcs	1/30/19	1/30/19	0.00	0.00	DC	
140	QC21-FG	1 Ea	1/30/19	1/30/19	0.00	0.00	QC21	

JAN 04 2019

Sign-off

JAN 15 2019

JAN 15 2019

JAN 15 2019

JAN 15 2019

JAN 15 2019

JAN 15 2019

JAN 15 2019

Part Op 130 - Identify and pack for shipping as per PPP 646.4001 Location: _____

Descriptions: 135 - Photocopy bluefile & type labels per PPP 646.4001

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
600.0129	VHB Tape	8 ft (8 ea)	90-Start up Operation	5019004
600.0990	Magnabond 6398 Part A Size 112 ml	1 Ea (1 ea)	90-Start up Operation	5139403
600.0991	Magnabond 6398 Part B Size 112 ml	1 Ea (1 ea)	90-Start up Operation	5139402
600.1012	Sealant PR1425B2 (#654 sem)	1 pcs (1 ea)	90-Start up Operation	5132228
600.1013	021200-3M Tape Primer 94 Primer 24216	5 Ea (5 ea)	90-Start up Operation	5136734
646.2910	Deflector	1 Ea (1 ea)	90-Start up Operation	5093821
646.3001	Lower Cable Cutter Assembly	1 Ea (1 ea)	90-Start up Operation	5127995
646.3110	Channel	1 Ea (1 ea)	90-Start up Operation	5136495
646.3210	Support	1 Ea (1 ea)	90-Start up Operation	5131207
646.3301	Upper Cutter Assembly	1 Ea (1 ea)	90-Start up Operation	5143377
646.3510	Strut	1 Ea (1 ea)	90-Start up Operation	5081641
646.3511	Strut	1 Ea (1 ea)	90-Start up Operation	5081639
646.3610	Filler	1 Ea (1 ea)	90-Start up Operation	5072241
646.3710	Doubler	1 Ea (1 ea)	90-Start up Operation	5049669
646.3711	Clip	1 Ea (1 ea)	90-Start up Operation	5063766
646.3712	Clip	1 Ea (1 ea)	90-Start up Operation	5038777
646.3713	Gusset	1 Ea (1 ea)	90-Start up Operation	5042029
646.3714	Gusset	1 Ea (1 ea)	90-Start up Operation	5050517
646.3715	Strut Doubler	2 Ea (2 ea)	90-Start up Operation	5082442
646.3716	Gauge Bracket	1 Ea (1 ea)	90-Start up Operation	5063780

Plex 12/5/18 12:47 PM dart.white.jesse



DART
AEROSPACE

Route update only

Job:

Part No.

Rework	
Scrap	
Use-as-is	

Skid-tube	
Machining	
Large Fab	

Cross tube	
Small Fab	
Finishing	

Eng. (Non-AW)	
Prod. Eng. Coord.	
Rec/Store/Packaging	

Engineering	
Water Jet	
Supplier	
Quality	

Sequence #:

QTY Affected :

MRB (QSI042)

Description Work Order Deviation

Disposition



Container No: S144871



Part: 646.4001

Job No: 187481

Serial No/Batch: S144871

Revision:

Inspector:

Exp Date: 06/14/2019

Instructions: FAA STC SR02180LA 14/88/07 T6 STC SH09 - 10 Issue 1, BRAZ

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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Completed By

Lead hand / Supervisor

QC / QA Coordinator

Root Cause

Operator	
Manufacturing Process	
Equip/Tooling	
Handling/Presservation	
Material	
Product Improvement	
Process Improvement	
Human Factors	

☐	Pressure/Forced
☐	Bending
☐	Crushing
☐	Cracks
☐	Crimp/Kink/Ripple/Wave/Twist
☐	Marks/Chatter
☐	Mislabeled

FAULT CATEGORY

- Contamination
- Misaligned/off center
- BOM/Route
- Broken/Damage/Defect
- Incomplete/Unclear Instructions
- Drill Holes
- Fit/Function

	Power Loss/Surge
	Folio/Program
	Grain Direction
	Weld
	Wrong Stock Pulled
	Out of Sequence
	Off-set/Set-up

☐	Positioned Wrong
☐	Outside Tolerance
☐	Drawing
☐	Finish
☐	Part Lost/Missing
☐	Misread

Other/Details:

646.3717	Doubler	1 Ea (1 ea)	90-Start up Operation	5082377
646.3718	Custom Washer	2 Ea (2 ea)	90-Start up Operation	5038803
646.3719	Doubler	2 Ea (2 ea)	90-Start up Operation	5063754
646.3810	Bracket	2 Ea (2 ea)	90-Start up Operation	5131074
646.3811	Radius Block	1 Ea (1 ea)	90-Start up Operation	5070843
646.3812	Gusset Bracket	2 Ea (2 ea)	90-Start up Operation	5131076
646.3813	AS350 Strut Bracket	1 Ea (1 ea)	90-Start up Operation	5131319
646.3910	Shim	4 Ea (4 ea)	90-Start up Operation	5126854
646.3911	Shim	1 Ea (1 ea)	90-Start up Operation	5041250
646.3912	Shim	4 Ea (4 ea)	90-Start up Operation	5126897
646.3913	Shim	1 Ea (1 ea)	90-Start up Operation	5041498
646.9410	Shim	1 Ea (1 ea)	90-Start up Operation	5140671
647.0112	Strut Bracket	2 Ea (2 ea)	90-Start up Operation	5133211
647.7703	Strut Assembly	2 Ea (2 ea)	90-Start up Operation	5128424
650.9201	Eyelet Bracket Assembly	2 Ea (2 ea)	90-Start up Operation	5122789
AN3-11A	Bolt	10 Ea (10 ea)	90-Start up Operation	5130322
AN3-12A	Bolt	2 Ea (2 ea)	90-Start up Operation	5095479
AN3-13A	Bolt	1 Ea (1 ea)	90-Start up Operation	5098032
AN3-3A	Bolt	4 Ea (4 ea)	90-Start up Operation	5131193
AN3-4A	Bolt	10 Ea (10 ea)	90-Start up Operation	5112901
AN3-5A	Bolt	2 Ea (2 ea)	90-Start up Operation	5119258
AN3-6A	Bolt	2 Ea (2 ea)	90-Start up Operation	5103950
AN316C4R	Nut, Jam	2 Ea (2 ea)	90-Start up Operation	5133132
AN44-5A	Eyebolt	2 Ea (2 ea)	90-Start up Operation	5127332
AN4C7A	Bolt	2 Ea (2 ea)	90-Start up Operation	5095478
AN665-34R	Clevis	2 Ea (2 ea)	90-Start up Operation	5127344
CCR264SS3-02	Cherry Rivet	36 Ea (36 ea)	90-Start up Operation	5103962
CR3213-5-3	Cherry Rivet	14 Ea (14 ea)	90-Start up Operation	5108525
MS20426AD5-7	Rivet	2 Ea (2 ea)	90-Start up Operation	5153848
MS20470AD5-5.5	Rivet	8 Ea (8 ea)	90-Start up Operation	51134062
MS20470AD5-6	Rivet	8 Ea (8 ea)	90-Start up Operation	5048897
MS20470AD5-7	Rivet	3 Ea (3 ea)	90-Start up Operation	5123425
MS21042L08	Nut	2 Ea (2 ea)	90-Start up Operation	5100409
MS21042L3	Nut	63 Ea (63 ea)	90-Start up Operation	5132364
MS21042L4	Nut	2 Ea (2 ea)	90-Start up Operation	5122434
MS21047-3	Nut Plate	18 Ea (18 ea)	90-Start up Operation	5103943
MS24693-C278	Screw	5 Ea (5 ea)	90-Start up Operation	5065341
MS24694-S51	Screw	5 Ea (5 ea)	90-Start up Operation	5123459
MS24694-S54	Screw	2 Ea (2 ea)	90-Start up Operation	5118346
MS24694-S55	Screw	3 Ea (3 ea)	90-Start up Operation	5099520
MS27039-08-13	Screw	2 Ea (2 ea)	90-Start up Operation	5123937
MS27039-1-10	Screw	2 Ea (2 ea)	90-Start up Operation	5124663
MS27039-1-12	Screw	6 Ea (6 ea)	90-Start up Operation	5124664
MS27039-1-16	Screw	24 Ea (24 ea)	90-Start up Operation	5104364
MS27039-1-19	Screw	22 Ea (22 ea)	90-Start up Operation	5133205
MS27039-1-20	Screw	2 Ea (2 ea)	90-Start up Operation	5094554
MS27039-1-21	Screw	4 Ea (4 ea)	90-Start up Operation	5104011
NAS1149F0332P	Washer	144 Ea (144 ea)	90-Start up Operation	5133206
NAS1149F0363P	Washer	2 Ea (2 ea)	90-Start up Operation	5075330
NAS1149F0432P	Washer	4 Ea (4 ea)	90-Start up Operation	5131202
NAS1149FN832P	Washer	4 Ea (4 ea)	90-Start up Operation	5136368

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	600.0129	8	160	0
	600.0990	1	0	0
	600.0991	1	0	0
	600.1012	1	35	0
	600.1013	5	29	0
	646.2910	1	16	0
	646.3001	1	10	0
	646.3110	1	3	0
	646.3210	1	18	0

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

646.3301	1	5	0
646.3510	1	33	0
646.3511	1	33	0
646.3610	1	29	0
646.3710	1	42	0
646.3711	1	35	0
646.3712	1	31	0
646.3713	1	21	0
646.3714	1	15	0
646.3715	2	17	0
646.3716	1	29	0
646.3717	1	18	0
646.3718	2	22	0
646.3719	2	21	0
646.3810	2	28	0
646.3811	1	20	0
646.3812	2	20	0
646.3813	1	25	0
646.3910	4	77	0
646.3911	1	32	0
646.3912	4	73	0
646.3913	1	28	0
646.9410	1	90	0
647.0112	2	93	0
647.7703	2	14	0
650.9201	2	35	0
AN3-11A	10	209	0
AN3-12A	2	170	0
AN3-13A	1	86	0
AN3-3A	4	333	0
AN3-4A	10	267	0
AN3-5A	2	232	0
AN3-6A	2	162	0
AN316C4R	2	88	0
AN44-5A	2	59	0
AN4C7A	2	107	0
AN665-34R	2	50	0
CCR264SS3-02	36	875	0
CR3213-5-3	14	260	0
MS20426AD5-7	2	972	0
MS20470AD5-5.5	8	186	0
MS20470AD5-6	8	969	0
MS20470AD5-7	3	122	0
MS21042L08	2	1,829	0
MS21042L3	63	3,324	0
MS21042L4	2	2,906	0
MS21047-3	18	324	0
MS24693-C278	5	99	0
MS24694-S51	5	383	0
MS24694-S54	2	384	0
MS24694-S55	3	74	0
MS27039-08-13	2	538	0
MS27039-1-10	2	193	0
MS27039-1-12	6	196	0
MS27039-1-16	24	377	0
MS27039-1-19	22	413	0
MS27039-1-20	2	83	0
MS27039-1-21	4	78	0
NAS1149F0332P	144	3,834	0
NAS1149F0363P	2	525	0
NAS1149F0432P	4	1,362	0
NAS1149FN832P	4	2,461	0

Part Specifications

Specifications could not be found.

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

REFERENCE ONLY

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NOTES:

1. AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
2. INSTALL F/N 14 WITH F/N 52 & 53.
3. 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.
4. 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.
5. REUSE FASTENERS FROM F/N 1.
6. USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.
7. AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.
8. INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.
9. NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

REFERENCE ONLY

5	5	5	78	601.3875	SCREW	MS24694554	
1	1	1	77	646.9410	SHIM	AN3-11A	
	4	4	76	601.2764	WASHER	MS21042-08	
	2	2	75	601.2973	LOCKNUT	MS27039-0813	
	2	2	74	601.2988	SCREW	MS21042-5	
	2	2	73	601.2943	LOCKNUT	AN316C4R	
	2	2	72	601.3128	NUT	MS21042-4	
	2	2	71	601.3209	LOCKNUT	AN3-12A	
	4	4	70	601.2638	WASHER	ANAC7A	
	2	2	69	601.2669	BOLT	AN365-34R	
	2	2	68	601.3119	CLEVIS	AN44-5A	
	2	2	67	601.3121	EYE BOLT		
	2	2	66	650.9201	EYE BRACKET ASSY		
REF	REF	REF	65	647.5701	GPS MOUNT KIT		
		2	64	601.3151	WASHER	AN311A	
		2	63	601.2911	SCREW	MS24694553	
	24	24	62	601.2637	SCREW	MS27039-1-16	
2	2	2	61	601.2763	BOLT	AN3-12A	
	1	1	60	646.3913	SHIM		
	4	4	59	646.3912	SHIM		
	1	1	58	646.3911	SHIM		
	4	4	57	646.3910	SHIM		
	5	5	56	600.1013	PRIMER		
	8 FT	8 FT	55	600.0129	VHB TAPE		
	1	1	54	600.1012	SEALANT	FR-105 CLASS B	
	1	1	53	600.0991	MACHOBOND 6396 PART B		
	1	1	52	600.0990	MACHOBOND 6396 PART A		
6	10	10	51	601.2826	BOLT	AN3-11A	
		2	50	646.3814	WIPER BRACKET		
		2	49	601.2910	SCREW	MS27039-1-18	
	2	2	48	601.1365	SCREW	MS27039-1-10	
	2	2	47	646.3719	DOUBLER		
	2	2	46	646.3718	CUSTOM WASHER		
	1	1	45	646.3717	DOUBLER		
	22	2	44	601.1948	SCREW	MS27039-1-19	
	2	2	43	601.1952	SCREW	MS27039-1-20	
	4	4	42	601.1956	SCREW	MS27039-1-21	

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 02199, 02198, 02197 & 02196	03/06/2010	P. BRAVO
B	INCORPORATED ECN 02046, 02045, 02044 & 02043	11/04/2014	P. BRAVO
C	INCORPORATED ECN 02028	09/09/2015	P. BRAVO

		2		2	41	601.2829	SCREW	MS24694554		
		2		2	40	601.2831	RIVET	MS20426AD5-7		
		1		1	39	646.3716	GAUGE BRACKET			
		6		6	38	601.1953	SCREW	MS27039-1-12		
	2			2	37	646.3715	STRUT DOUBLER			
	2		2	2	36	601.2824	BOLT	AN3-5A		
12	36			36	35	601.2277	RIVET	CCRM455-3-02		
6	18			18	34	600.0795	NUTPLATE	MS21047-3		
3	3			3	33	601.2565	RIVET	MS20470AD5-7		
1	1			1	32	646.3813	STRUT BRACKET			
4	4			4	31	601.2822	BOLT	AN3-3A		
2	2			2	30	646.3812	GUSSET BRACKET			
8	8			8	29	601.2564	RIVET	MS20470AD5-6		
1	1			1	28	646.3714	GUSSET			
	1	1		1	27	646.3610	FILLER			
	3	3		3	26	601.2830	SCREW	MS24694555		
	2	2		2	25	601.2825	BOLT	AN3-5A		
	1	1		1	24	646.3811	RADIUS BLOCK			
	1	1		1	23	646.3712	CLIP			
	1	1		1	22	646.3711	CLIP			
8	8			8	21	601.2832	RIVET	MS20470AD5-5.5		
14	14			14	20	601.2020	RIVET	CP3213-5-3		
4	6	4	6	10	19	601.2823	BOLT	AN3-4A		
	1	1	1	1	18	601.2827	BOLT	AN3-13A		
	5	5		5	17	601.2912	SCREW	MS24694551		
	1	1		1	16	646.3713	GUSSET			
	1	1		1	15	646.3210	SUPPORT			
		1		1	14	646.3710	DOUBLER			
		1	1		13	646.3110	CHANNEL			
14	10	8	53	6	61	12	601.1624	LOCKNUT	MS21042-3	
16	32	18	120	16	144	11	601.1607	WASHER	NAS1149F0332P	
				1	10	646.3410	LH WIPER DEFLECTOR			
					9	646.3411	RH WIPER DEFLECTOR			
			2	2	8	647.7703	STRUT ASSY			
			2	2	7	647.0112	STRUT BRACKET			
		1	1		6	646.3511	STRUT			
	1	1	1		5	646.3510	STRUT			
2		2		2	4	646.3810	BRACKET			
			1	1	3	646.2910	DEFLECTOR			
	1	1	1	1	2	646.3001	LOWER CUTTER ASSY			
			1	1	1	646.3301	UPPER CUTTER ASSY			
X						646.4006	LOWER CUTTER TIED PROVISIONS			
	X					646.4005	LOWER CUTTER REMOVABLE PROVISIONS			
		X				646.4004	FIXED PROVISIONS KIT			
			X			646.4003	CABLE CUTTERS KIT WITHOUT FIXED PROVISIONS			
				X		646.4002	AS350 WIPER DEFLECTOR KIT			
					X	646.4001	AS350 CABLE CUTTERS KIT			
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE 08-27-06 DRAWN BY: SCHEIDER E. HURT P. BRAVO DRAWING APPROVAL P. BRAVO DATE 08-27-06 CONTRACT NO.	
DIMS (OTHER THAN SPECIFIED) DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS: ±.010 2 PLACE DECIMALS: ±.005 ANGLES: ±.5°		DART AEROSPACE 9030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 AS350 CABLE CUTTERS KIT SET B CAGE CODE 07M26 DWG. NO. 646.4000 SCALE NONE SHEET 1 OF 5	